



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/928,493

08/13/2001

Albert Honey Perdon

SEDN/PRED144

7921

56015 7590 11/14/2008

PATTERSON & SHERIDAN, LLP/  
SEDNA PATENT SERVICES, LLC

595 SHREWSBURY AVENUE

SUITE 100

SHREWSBURY, NJ 07702

EXAMINER

SALL, EL HADJI MALICK

ART UNIT

PAPER NUMBER

2457

MAIL DATE

DELIVERY MODE

11/14/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* ALBERT HONEY PERDON and ANTHONY SCOTT ODDO

---

Appeal 2008-1339  
Application 09/928,493<sup>1</sup>  
Technology Center 2400

---

Decided: November 13, 2008

---

*Before* JAMES D. THOMAS, JAY P. LUCAS, and ST. JOHN  
COURTENAY, *Administrative Patent Judges*.

LUCAS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal from a final rejection of claims 1 to 12, 14 to 33, 35 to 44, and 46 to 57 under authority of 35 U.S.C. § 134(a). The Board of

---

<sup>1</sup> Application filed August 13, 2001. The real party in interest is SEDNA PATENT SERVICES, LLC.

Patent Appeals and Interferences (BPAI) has jurisdiction under 35 U.S.C. § 6(b). Claims 13, 34, 45, and 58 are canceled.

Appellants' invention relates to a method for predicting the behavior of a user by using information on how other users reacted in similar circumstances. In the words of the Appellants:

One embodiment of the present invention is directed to a technique for predicting the behavior of a current user of an interactive service. Each activity in which the current user participates while engaged with the interactive service is identified, as well as the conditions surrounding each activity. A first collection of data is accessed that reflects (i) cumulative activities in which other users have participated, (ii) conditions surrounding the other users' cumulative activities, and (iii) patterns of behavior exhibited by the other users derived from their participation in such cumulative activities. The current user's identified activities and surrounding conditions are compared with the other users' cumulative activities and surrounding conditions, to identify similarities. Finally, a pattern of future behavior is attributed to the current user, based on the identified similarities and on the other users' patterns of behavior.

(Spec., 5).

Claim 1 is exemplary:

1. A method of predicting the behavior of a current user of an interactive television service, comprising the steps of:

identifying, by a set top box, each activity in which the current user participates while engaged with the interactive television service, and conditions surrounding each such activity;

accessing, by a set top box, a first collection of data that reflects (i) cumulative activities in which other users have participated, (ii) conditions

surrounding such other users' cumulative activities, and (iii) patterns of behavior exhibited by such other users through their participation in such cumulative activities, the activities including viewing interactive television programming;

comparing, by a set top box, (i) the current user's identified activities and surrounding conditions and (ii) the other users' cumulative activities and surrounding conditions, to identify similarities therebetween; and

attributing, by a set top box, to the current user a pattern of future behavior based on such similarities and on the other users' patterns of behavior.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Herz	US 6,029,195	Feb. 22, 2000
Rooney	US 6,819,669 B2	Nov. 16, 2004
		(filed Mar. 28, 2001)

#### REJECTION

Claims 1 to 12, 14 to 33, 35 to 44, and 46 to 57 stand rejected under 35 U.S.C. § 103(a) for being obvious over Herz in view of Rooney.

#### Groups of Claims:

The claims are considered together, claim 1 being representative.

Appellants contend that the claimed subject matter is not rendered obvious by Herz in combination with Wang, for failure of the combination

to teach each claimed limitation. The Examiner contends that each of the claims is properly rejected.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the Briefs and the Answer for their respective details. Only those arguments actually made by Appellants have been considered in this opinion. Arguments which Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived.

We affirm the rejection.

#### ISSUE

The issue is whether Appellants have shown that the Examiner erred in rejecting the recited claims under 35 U.S.C. § 103(a). The issue turns on whether Herz teaches accessing a first collection of data that reflects the participation and behavior patterns of other users and compares them and attribute them to a current user as claimed.

#### FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence.

1. Appellants have invented a method of attributing to a current user a pattern of behavior for an activity when there may not be sufficient data on that particular user to predict his future actions. (Spec., 3, l. 15 *ff*).  
The method involves collecting data on other users' cumulative activities,

the conditions surrounding those activities and their pattern of behavior. Those are compared to the current user's identified activities and conditions, and if sufficient similarities are noted, attributing to the current user the pattern of behavior of the other users. (Spec., 5, top).

2. Herz, the primary reference, in relevant parts relates to helping users find objects while searching, as on the Internet. (Abstract). Target objects' main attributes are profiled, and the user or users seeking the objects are profiled. (Col. 4, l. 48 to col. 5, l. 5). A match is made between the profile information of the user and the profile information of the target objects. (Col. 6, ll. 15-25). An example concerning interactive TV is described in which larger groups of users are divided into sub-communities according to commonly shared interests. (Col. 90, l. 18 *ff*).
3. Herz also teaches the prediction of next actions of a user. Users are clustered according to the similarity of their user profiles. (Col. 48, l. 49). "[W]here the system cannot confidently make a prediction as to what a particular user will do, because the relevant statistics concerning that user's user cluster are derived from only a small amount of data, the system may instead make its predictions based on the aggregate statistics for all users, which are derived from a larger amount of data." (Col. 48, ll. 59-64).

## PRINCIPLES OF LAW

Appellants have the burden on appeal to the Board to demonstrate error in the Examiner's position. See *In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) ("On appeal to the Board, an applicant can overcome a rejection [under § 103] by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.") (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

"To reject claims in an application under section 103, an examiner must show an un rebutted *prima facie* case of obviousness. ... On appeal to the Board, an applicant can overcome a rejection by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness." [citations removed] *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

## ANALYSIS

From our review of the administrative record, we find that Examiner has presented a *prima facie* case for the rejections of Appellants' claims under 35 U.S.C. §103(a). The *prima facie* case is presented on pages 3 to 24

of the Examiner's Answer.<sup>2</sup> In opposition, Appellants present a number of arguments.

*Arguments with respect to the rejection  
of claims 1 to 12, 14 to 33, 35 to 44, and 46 to 57  
under 35 U.S.C. § 103(a)*

Appellants argue that Herz fails to teach

“the combination of accessing a collection of data that reflects cumulative activities that other users have participated, conditions surrounding such other user' cumulative activities, and patterns of behavior exhibited by such other users through their participation in such cumulative activities, then using this data to identify similarities between the activities and surrounding conditions for the current user and other users, and attributing a pattern future behavior to the current user based on the other users' patterns of behavior.”

(App. Br., 15, bottom).

After a careful review of the Herz reference, we cannot agree with the Appellants. The Examiner points out that Herz teaches on Col. 48, l. 49, the collection of patterns of behavior of “other users.” Though the “other users”

---

<sup>2</sup> We observe that claims 41 and 42 are drawn to a computer readable medium, but are dependent on claim 1, drawn to a method. Due to the placement and content of claims 41 and 42, we will assume that a typographical error was made, and that these claims were intended to be dependent on the computer readable medium of claim 35, as are the previous and subsequent claims.



are eventually subdivided into sub-communities, the critical step of attributing the other users' patterns of behavior to a current user is not presented in that section. However, in Column 48 the reference teaches attributing the behavior of a similar group of individuals to an individual about whom there is insufficient data. See FF#3 above. Appellants argue that the profiles in Herz are different from the claimed activities identified for the current user and surrounding conditions. (Reply Br., 3, bottom). As the Column 90 teaching of Herz reflects patterns of interactive TV watching, we are not convinced that the claimed activities are unobvious over the recited prior art of Herz. Appellants argue that this activity is merely pre-fetching of the data to cluster groups according to their user profiles, and not the actual searching as claimed. (App. Br., 18, middle). We fail to support this distinction, as it is not reflected in the claim language and not of sufficient weight to render the prior art non-analogous. Herz teaches the attributing to the individual user the patterns of future behavior based on the other users' patterns, as claimed. (Col. 48, l. 64). See Examiner's arguments. (Answer, 29, bottom).

The Rooney reference is cited merely for its disclosure of the set-top box teaching, for which it is sufficient.

Appeal 2008-1339  
Application 09/928,493

### CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that the Examiner did not err in rejecting claims 1 to 12, 14 to 33, 35 to 44, and 46 to 57.

### DECISION

The Examiner's rejection of claims 1 to 12, 14 to 33, 35 to 44, and 46 to 57 is Affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

rwk

PATTERSON & SHERIDAN, LLP/  
SEDNA PATENT SERVICES, LLC  
595 SHREWSBURY AVENUE  
SUITE 100  
SHREWSBURY NJ 07702